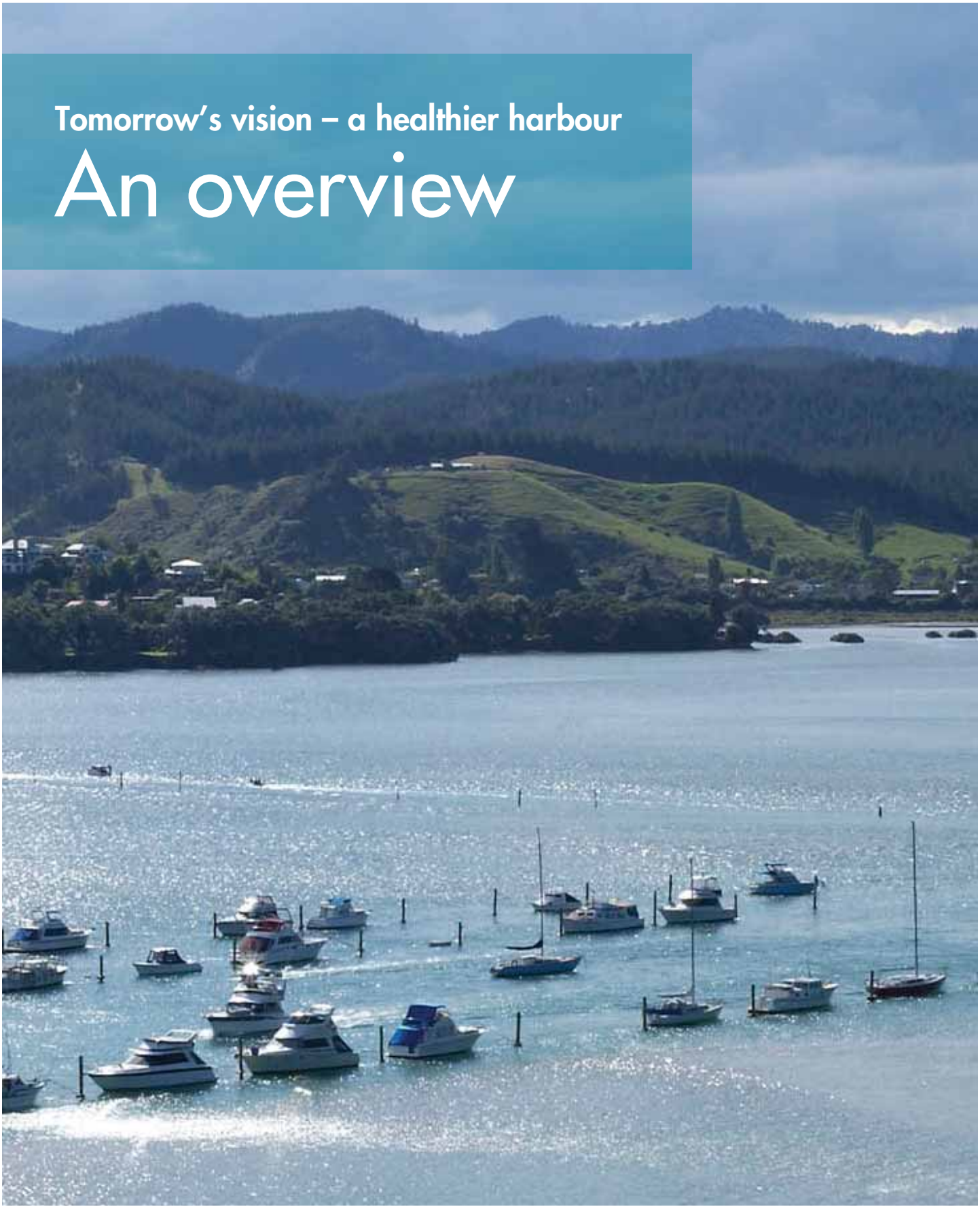
Tomorrow's vision – a healthier harbour

An overview



- Draft Whangamata Harbour Plan
- Draft Whangamata Catchment Management Plan
- Whangamata Mangrove Management Options Report

Environment Waikato
REGIONAL COUNCIL

Over the years various visions for Whangamata's harbour have been developed by a number of community groups and through a range of community processes. Although described in different ways, there are some common outcomes they're all seeking.

- **Clean water.**
- **Thriving ecosystems – in the harbour and surrounding wetland and forest areas.**
- **A stable catchment.**
- **Access to and around the harbour.**

To help achieve these outcomes, Environment Waikato has developed a long-term integrated approach to managing Whangamata's harbour and surrounding land.

This process was initially prompted by a community meeting held in November 2005 to discuss the spread and management of mangroves in the harbour. Those attending the meeting agreed there needed to be an integrated plan that addressed the risks to the harbour's health, particularly sedimentation, which is the main reason why the mangroves have spread. In response to this, the Draft Whangamata Harbour Plan[1] has been developed in conjunction with Whangamata Harbour Care, Whangamata Community Board, Department of Conservation, Thames-Coromandel District Council, Forest & Bird, iwi and a range of other community groups.

The harbour plan is supported by two other documents.

- Draft Catchment Management Plan[2] which sets out the priority works we propose to carry out to address the sedimentation and flooding issues identified in the harbour plan, the time frame over which the works will be done and estimated costs.

- Whangamata Mangrove Management Options Report[3] which details six scenarios for managing mangroves, including 'no removal'.

Before we can finalise the harbour and catchment plans, confirm the timeframe over which the works identified in the catchment plan will be carried out or decide how mangroves will be managed, we need the Whangamata community to give us feedback on these three documents.

This overview summarises key information from the harbour and catchment plans and mangrove management options report. Copies of the full documents and feedback form can be viewed at:

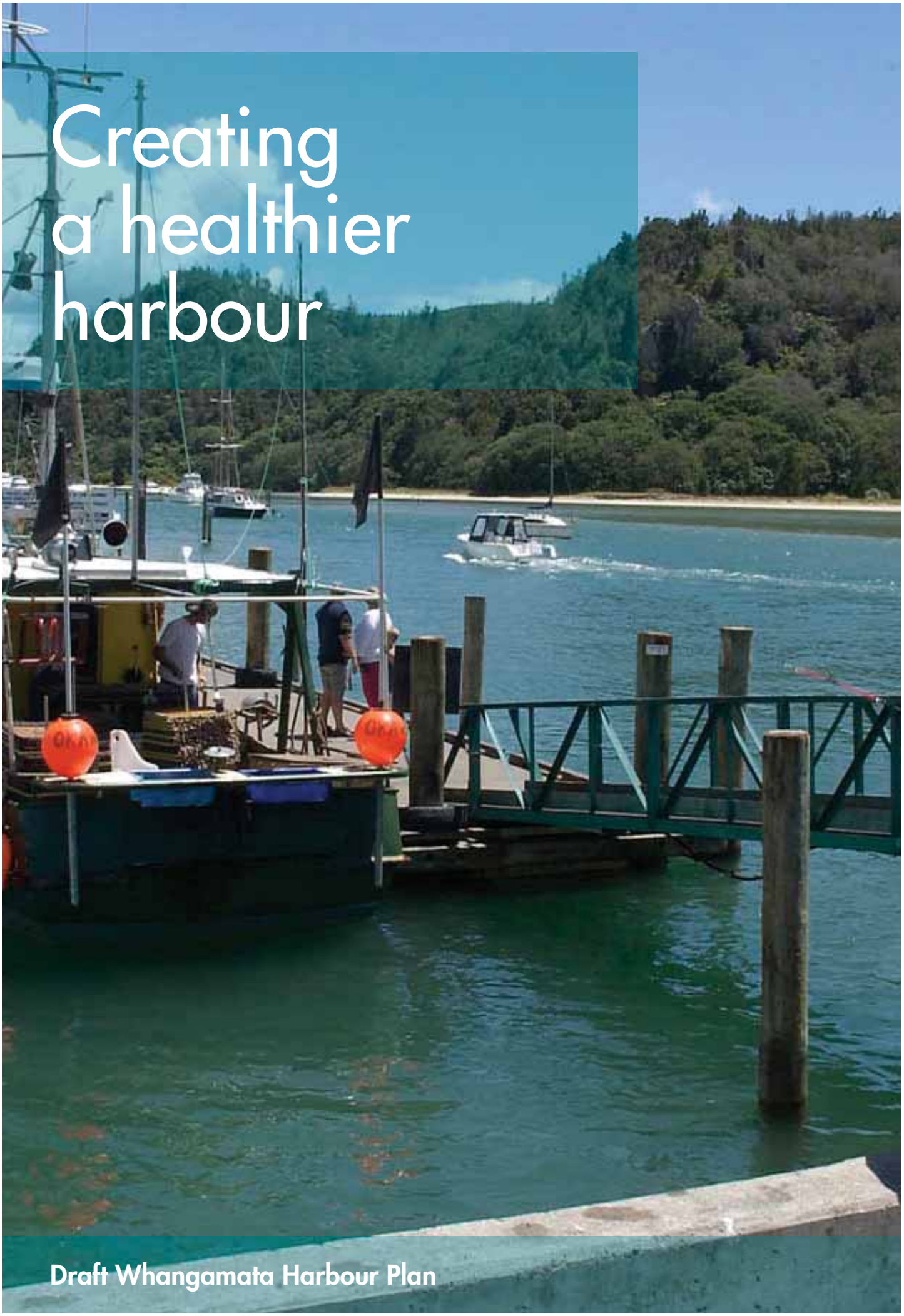
- libraries in Thames, Whangamata and Hamilton
- Environment Waikato's offices in Hamilton and Whitianga
- Thames-Coromandel District Council's offices in Thames and Whangamata.

Alternatively, they can be downloaded from www.ew.govt.nz/projects/whangamata/index.htm or ordered by phoning Environment Waikato's freephone 0800 800 401.

[1] Environment Waikato. 2007: Draft Whangamata Harbour Plan. Environment Waikato Internal Series 2007/14, Environment Waikato, Hamilton. Available online at www.ew.govt.nz/projects/iwhangamata/index.htm.

[2] Environment Waikato. 2007: Draft Whangamata Catchment Management Plan. Environment Waikato Internal Series 2007/13, Environment Waikato, Hamilton. Available online at www.ew.govt.nz/projects/iwhangamata/index.htm.

[3] Environment Waikato. 2007: Draft Whangamata Mangrove Management Options report. Environment Waikato Internal Series 2007/15, Environment Waikato, Hamilton. Available online at www.ew.govt.nz/projects/iwhangamata/index.htm.



Creating a healthier harbour

Draft Whangamata Harbour Plan

The Draft Whangamata Harbour Plan notes a number of key points.

- Whangamata Harbour has multiple uses, provides attractive views and is a place for recreation and food gathering. It is also recognised in the Waikato Regional Coastal Plan as an area of significant conservation value, hosting a wide variety of plant and animal life including threatened and rare species. However, many of the harbour's wetland and saltmarsh habitats are slowly degrading as a result of pressures from people's activities, weeds and pests, sedimentation, mangrove expansion and stock damage.
- Reducing the amount of sediment entering the harbour is a high priority. This problem has developed over decades from soil erosion caused by land clearance for urban and agricultural use (including farming and forestry) and from stream bank erosion.
- Increased sedimentation has contributed to the expansion of mangroves in the harbour because mangroves grow in mud. The expanding mangroves have restricted access to parts of the harbour.
- The land and harbour are connected – what we do on the land surrounding the harbour can affect the harbour's health. That's why an integrated approach is needed to manage the harbour.
- An integrated approach means environmental concerns must be balanced with social, cultural and economic impacts. This approach also recognises the importance of actively working with communities to identify and carry out the most appropriate solutions.

The harbour plan also assesses the extent and importance of key concerns and risks to the harbour, which have been grouped into five core issues:

- water quality
- habitat (where plants and animals live)
- sedimentation
- flooding
- recreation, access and views.

Some of the concerns and risks relate to actual problems which need to be addressed – a range of actions to overcome them are proposed in the plan. Others are believed to be problems but aren't necessarily.[4]

Although Environment Waikato would be responsible for some of the actions proposed in the harbour plan, many of them rely on other agencies, community groups and individuals working together. The full Draft Whangamata Harbour Plan identifies who could be responsible for each of the actions.[5]

[4] For more information on priorities and actions related to these issues, see Section 4 of the full Draft Whangamata Harbour Plan 2007.
[5] See Section 4.1.2 of the full Draft Whangamata Harbour Plan 2007.

The harbour plan involves looking at the harbour and the way we use the land that surrounds it.



Issue 1

Water quality

Key concerns/risks	Actions already being carried out	Proposed actions
Bacteria and nutrient levels from wastewater and stormwater entering the harbour, affecting water quality and shellfish.	Stormwater treatment at selected outlets. An upgrade of the wastewater plant. Some fencing and planting along the edges of waterways to keep stock out, reduce erosion and filter bacteria and nutrients. Rules in the Waikato Regional Plan that require farmers to: ■ prepare and implement a nutrient management plan if they are applying more than 60 kilograms of nitrogen per hectare per year and/or applying fertiliser to land that has had farm animal effluent applied to it in the past 12 months ■ ensure farm dairy effluent does not discharge into surface water or contaminate groundwater.	Options for removal of contaminants from stormwater are in place or being investigated. Continue education to ensure people understand that chemicals and contaminants should not be poured down stormwater drains or onto surfaces draining to stormwater. Put in place processes to reduce high loads of contaminants coming from two permanent drains entering the Wentworth River. Encourage more farmers to fence and plant the waterways on their properties (including wetland and seepage areas) and install bridges and culverts for stock crossings. Identify properties with high rates of nutrient leaching and run-off, and help the owners put in place practices that will improve their nutrient efficiency and reduce contaminant run-off. Carry out animal pest control in forested areas to reduce bacteria from feral animals. Avoid excess or unnecessary fertiliser use.
Accidental spills of oil or contaminants.	An emergency response team is available to deal with accidental spills.	Regularly inspect high risk industries. Continue spill prevention and containment training. Ensure equipment for spills is readily available. Boaties need to be aware of spill prevention procedures and the actions they should take if a spill occurs.
The need for catchment-based planning to protect water quality.	The Peninsula Project, Wentworth River Clean Streams project and Whangamata's sewage plant upgrade all incorporate catchment-based planning.	Prioritise in regional and district planning documents the actions needed to improve water quality.

Issue 2 Habitat

Key concerns/risks	Actions already being carried out	Proposed actions
Marine and saltmarsh habitats are slowly being degraded.	To date, very little has been done to manage these habitats.	Assess saltmarsh areas, identify key locations for restoration and develop individual restoration plans. Set up care groups. Carry out the recommendations in the Moanaanuanu Estuary Rehabilitation Concept report.
Loss of wetlands by drainage and reclamation of the harbour edge.	To date, very little has been done to manage these habitats.	Identify key locations for restoration and develop individual restoration plans. Set up care groups. Carry out the recommendations in the Moanaanuanu Estuary Rehabilitation Concept report. Follow up and rectify any infilling or dumping activities.
Invasive weeds and pests (land, freshwater and marine).	Some individuals have been controlling possums on their properties. The Department of Conservation (DOC) has carried out goat control operations in the upper catchment. Changes in the extent of seagrass are monitored by Environment Waikato. Local residents, with support from Environment Waikato and DOC, have been trapping rats around the Moanaanuanu Estuary since December 2006.	Set up local pest control schemes and projects in key locations. Carry out animal pest control work through the Peninsula Project. Control saltwater paspalum in the harbour. Inform householders about the dangers of planting potentially invasive exotic plants on the harbour's edge. Manage and replant existing areas. Routinely inspect key locations for invasive marine organisms. Spread material removed from stormwater drains instead of piling it along the bank.



Key concerns/risks	Actions already being carried out	Proposed actions
Mangrove expansion and unauthorised clearing of mangroves.	In December 2006 Whangamata Harbour Care Inc. was granted a consent for 12 years to remove mangrove seedlings between January and July. Selected mature mangroves have been removed by Environment Waikato.	Continue to remove seedlings in consented areas. Continue monitoring areas where consented mangrove removal has already been carried out to ensure harmful or unwanted effects are prevented or reduced. Carry out ongoing consultation on mangrove management to resolve the issue of mature mangroves in the harbour. Prepare a consent for removing mature mangroves in selected areas, if required.
Whitebait and eel numbers.	All road culverts surveyed throughout the Waikato region that are considered to form a barrier to upstream fish movement are currently being prioritised to determine which ones should be fixed first.	Exclude stock from riparian and wetland areas, particularly those with a tidal influence as these stream banks are whitebait spawning sites. Modify culverts blocking fish passage.
Ecological corridors connecting the different ecosystems.	The Wentworth Rivercare Group has been working for several years to fence and plant the length of the river.	Fence and plant areas that connect habitats. Ensure corridors are included in pest control programmes. Seek advice from specialist wildlife experts to determine suitable ecological corridor design and location.
Harvesting pressures on shellfish.	Ngati Puu has carried out shellfish surveys and monitored the harvest over several years.	Continue to police and enforce shellfish gathering regulations. Continue to routinely assess the shellfish beds to ensure that over-harvesting is not occurring.



Saltmarshes are nurseries for juvenile fish, and important breeding and feeding areas for birds.

Issue 3 Sedimentation

Key concerns/risks	Actions already being carried out	Proposed actions
Too much sediment entering the harbour from: ■ stream bank and hill slope erosion ■ erosion from forest harvesting areas ■ erosion from urban development.	The Wentworth Rivercare Group has been working for several years to fence and plant the length of the river. About 70 per cent of the fencing has been completed. Environment Waikato supports land owners, groups and communities through the Peninsula Project and Clean Streams fund to carry out erosion protection, environmental enhancement, river management, animal pest control and flood protection works. Forest harvesting and associated activities typically require resource consents from Environment Waikato which stipulate a range of conditions that must be met. Environment Waikato has developed an erosion and sediment control guideline manual for earthworks, which is the standard reference for consent requirements relating to earthworks.[6]	Identify slopes of high erosion risk. Ensure the land use or land management of high risk steeper areas is appropriate for the slope. Use a sediment model as part of the consenting process to estimate the risk of large amounts of sediment being produced at one time (sediment 'slugs') during the proposed development. If the risk is considered to be too high, the developer could be required to alter the plans. Investigate the option of using created or natural sediment retention areas to trap sediment before it enters the harbour. Fence and plant waterways and eroding areas. Explore ways to manage bank erosion along the Wentworth River, including the option of reshaping the banks to prevent their collapse. Continue monitoring existing consents to ensure forestry activities follow best practice and comply with the appropriate standards. Monitor the annual rate of forestry harvest in each catchment to avoid removing significant areas in short timeframes. Continue to require consents for earthworks in high risk erosion areas and to promote the use of existing guidelines through consents, advocacy and training. Establish ongoing ownership of consents for when developers have moved on.

[6] This manual is available from Environment Waikato in hard copy or online at http://www.ew.govt.nz/enviroinfo/land/erosion/sediment.htm.

Key concerns/risks	Actions already being carried out	Proposed actions
Mangroves retaining sediment.	Studies have been carried out to determine the effect of mangroves on sediment accumulation.[7]	Carry out ongoing consultation on mangrove management to determine how mangroves will be managed.[8] Develop a habitat restoration plan to manage mangroves in key locations.
Sediment accumulating around the causeway.	No actions are being carried out.	Report on the sediment effects of replacing the causeway with culverts or a bridge.

[7] Environment Waikato. 2007: Wentworth River Flood Hazard Assessment 2007. Environment Waikato Technical Report 2007/16, Environment Waikato, Hamilton.

[8] Environment Waikato's Whangamata Mangrove Management Options Report and its questionnaire aim to gather more targeted feedback on a range of scenarios for dealing with mangroves in various areas of the catchment.



Soil eroding from the land is entering Whangamata's streams and flowing into the harbour, causing parts of the harbour to infill.

Issue 4 Flooding

Key concerns/risks	Actions already being carried out	Proposed actions
Flooding caused by mangroves blocking stream mouths and drainage outlets to the harbour.	In 2006 Environment Waikato removed selected mature mangroves from Te Weiti Stream to increase its capacity to carry floodwaters.	Establish and maintain a clear channel for water to flow to the sea. This includes clearing obstructing mangroves and removing any surplus build up of silt that is affecting drainage and impacting on upstream properties.
Flooding in low lying areas (for example, near the Wentworth River).	Environment Waikato has developed the Wentworth River Flood Hazard Assessment Report 2007 to assist in making decisions related to dealing with vegetation blockages in the Wentworth Valley and Moanaanuanu Estuary areas.	Investigate options for managing the river and floodway as part of the Peninsula Project and the Whangamata Catchment Management Plan. Carry out the recommendations in the Wentworth River Flood Hazard Assessment Report 2007.
Animal pests contributing to erosion.	Some goat control has been carried out in the Whangamata catchment.	Carry out further animal pest control work where animal pests are impacting on erosion and soil run-off (for example, in the forested areas of the upper catchment) as part of the Peninsula Project's pest control operations.



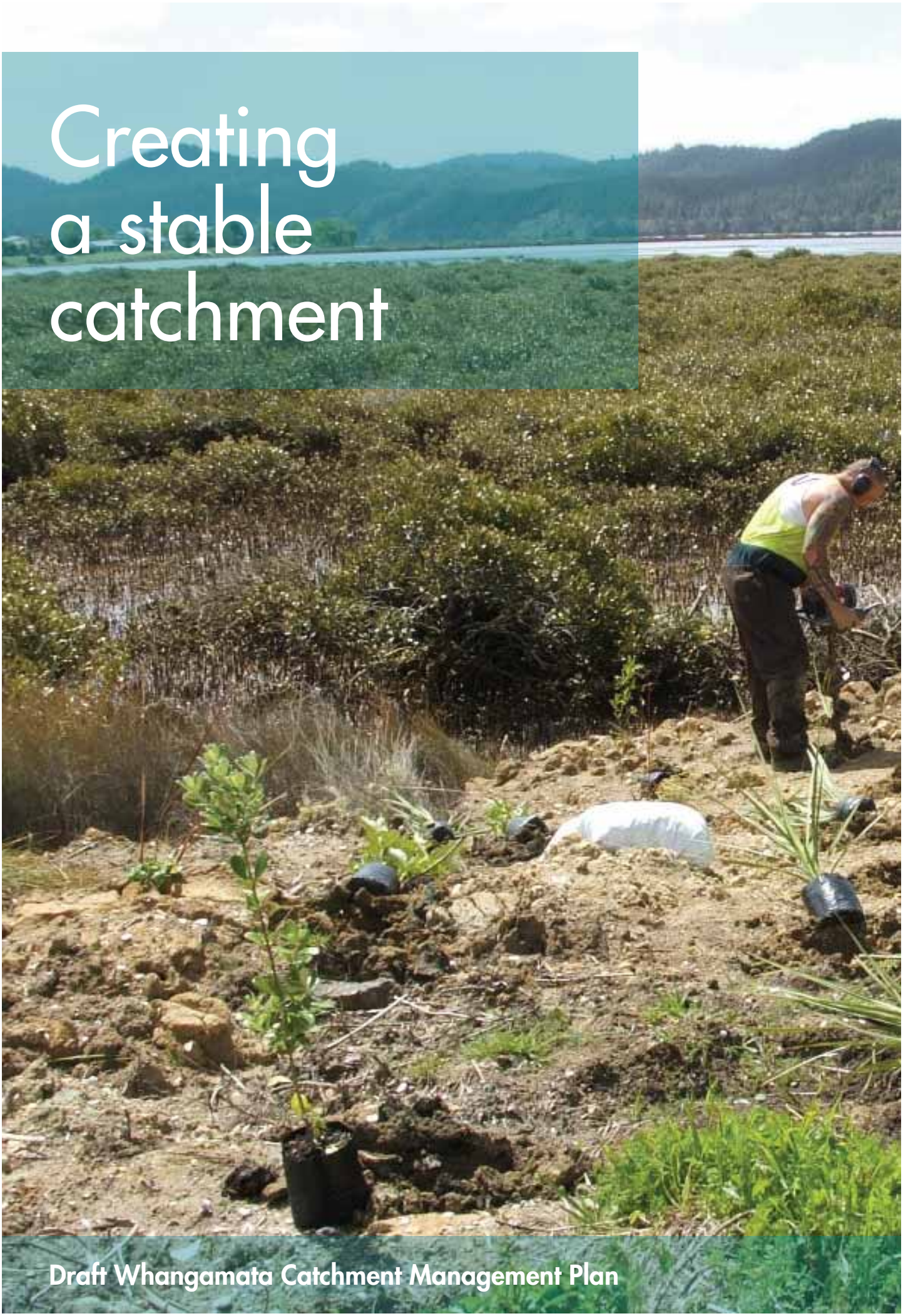
Mangroves and other debris blocking stream channels are contributing to flooding.

Issue 5 Recreation, access and views

Key concerns/risks	Actions already being carried out	Proposed actions
Antifouling paints affecting sea life.	The two chemicals found in antifouling paints (diuron and irgarol) were measured in water and sediment in Whangamata Harbour.	Although the levels of diuron and irgarol in the water were safe, areas used for hull scraping and washing should be carefully managed to prevent contaminants entering the harbour.
Public access to the harbour needs to be maintained.	There is plenty of access to esplanade reserves and the urban areas of the harbour. The channel to the boat ramp is dredged on a monthly basis to maintain boat access in the harbour. In response to Thames-Coromandel District Council's Draft Boat Ramp Levels of Service report (2006a), the Harbour Committee and Community Board have been discussing whether the existing boat ramp should remain as it is or be concreted.	Continue to provide access to and around esplanade reserves. Provide suitable launching ramps. Start thinking about options for meeting boat trailer parking needs – this is an emerging issue.
Views of the western slopes.	The current Thames Coromandel District Plan has zoned the land on the western face of Te Puia Point as coastal. This indicates that the land has special characteristics, including outstanding landscape values but there are no special conditions encouraging its reversion to native vegetation.	This issue cannot be addressed through the harbour plan. However, important views and landscapes for each settlement/catchment will be identified through the Coromandel Peninsula Blueprint project.[9]
Harbour views	No actions being carried out.	This issue cannot be addressed through the harbour plan. However, important views across the harbour and any related special building requirements, or need for protection from development, will be identified through the Coromandel Peninsula Blueprint project.

[9] This is a joint project between Thames-Coromandel District Council, Environment Waikato, Department of Conservation and Hauraki Whanui.

Creating a stable catchment



To address the sedimentation and flooding issues identified in the harbour plan as a high priority for action, the Draft Whangamata Catchment Management Plan has prioritised the following proposed works in the Wentworth, Waikiekie, Te Weiti and Otuwhete sub-catchments.

The works are simply a proposal at this stage. That's because much of the work is dependent on the willingness of land owners to carry out work on their properties and contribute to the costs. Given this, Environment Waikato will be meeting with land owners to discuss and agree on the works before the catchment plan is finalised.

The Wentworth River sub-catchment would be our initial priority because this is the largest river system in the Whangamata catchment and it has the highest silt loading.

Proposed priority works

Land management protection

- Assist land owners to fence forest fragments to keep stock out.
- Carry out animal pest control work in pine and native bush areas on both public and private land.

Riparian enhancement

- Plant eco-sourced native plants along stream banks and around wetlands.
- Fence out all waterways where stock have access, including tributaries and drains.
- Control weeds in riparian areas.
- Plant willow poles.

River and flood management

- Remove blockages from stream channels, for example tree stumps.
- Repair corners that have eroded.
- Remove willows.
- Mangrove removal and coastal excavation (depending on the approach the council adopts).
- Investigate the possibility of installing silt traps.
- Remove vegetation blocking floodplains and reshape these areas.

Specific works in the Wentworth River sub-catchment

- Reduce soil erosion and the amount of sediment entering the harbour from the Wentworth River sub-catchment by:
  - fencing and planting the river banks, especially actively eroding areas
  - removing debris and blockages from the river and reshaping eroding banks where needed.
- Initiate a river survey of the lower Wentworth River to monitor changes that may have an impact on flooding.
- Establish an animal pest control programme in the upper catchment.
- Undertake restoration planting of riparian, wetland and bush areas to improve biodiversity and reduce erosion.

The expected outcomes

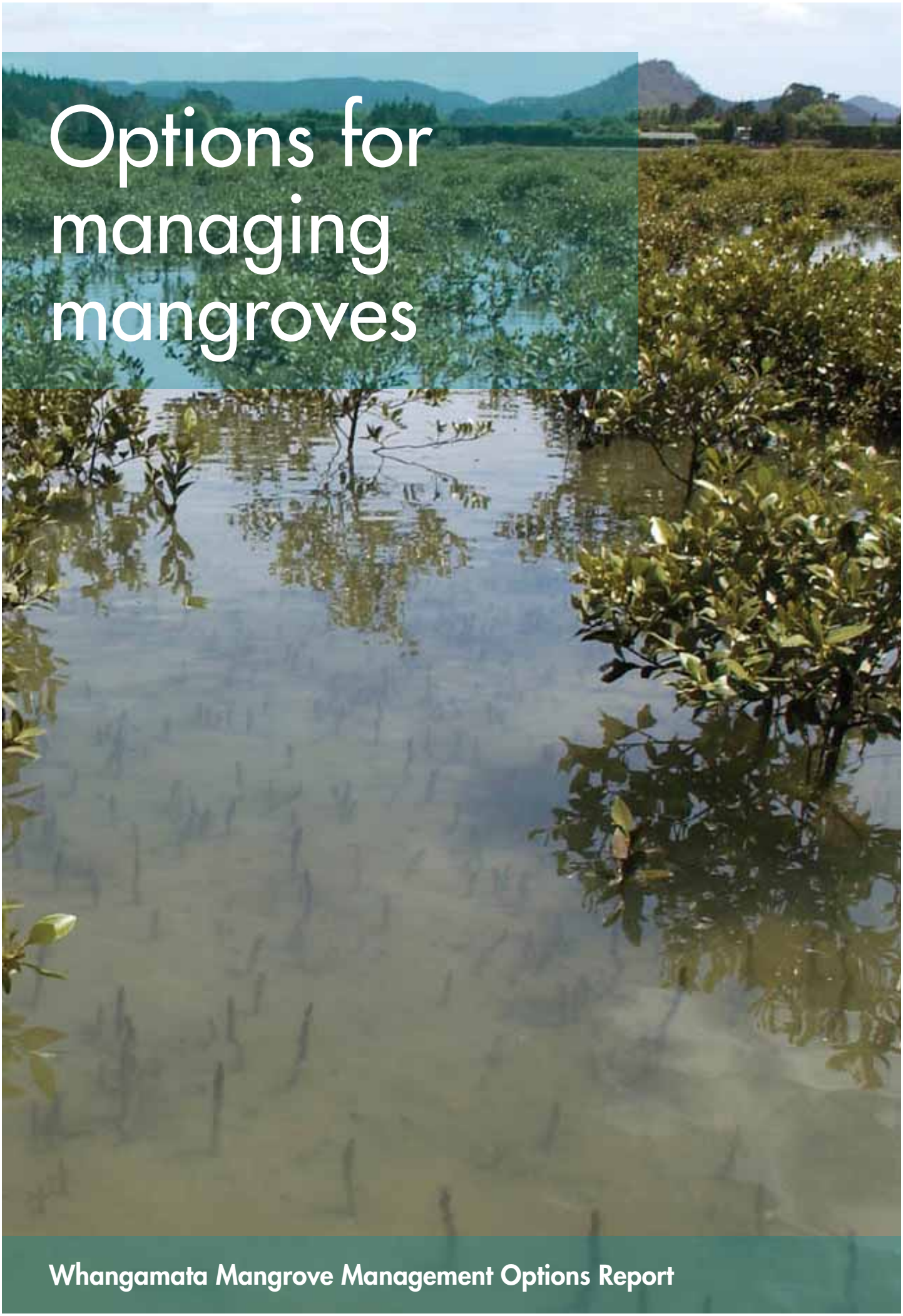
The primary aim of these works is to reduce the amount of soil eroding into the streams, leading to less sedimentation and infilling of the harbour. This will also help limit the places where mangroves can grow. There will be other benefits too, like more native plants, improved habitats for fish and insects and better water quality.

Costs and funding

Environment Waikato currently has funding available through the Peninsula Project to carry out these works in conjunction with private land owners. The works, which have been estimated at $670,000, would be carried out over a 10-year period.[10] Land owners would pay up to 65 per cent of the cost of works on their properties.

Although it will take a long time before you see significant changes in the harbour, doing the work over a shorter timeframe would accelerate the process. If Whangamata ratepayers want these works carried out over a shorter timeframe, additional funding would be needed to provide land owners with more financial support. This would mean an increase in the rates Whangamata ratepayers currently pay.

[10] See the Draft Whangamata Catchment Management Plan 2007 for full details.



Options for managing mangroves

Whangamata Mangrove Management Options Report

The Whangamata Mangrove Management Options Report emphasises that mangrove expansion in Whangamata Harbour relates to two key points.

- Most of Whangamata's mangrove expansion has happened during decades of land clearance for urban development, forestry and farming.
- Erosion and soil run-off into the area's waterways, and then into the harbour, has provided a 'garden' for the mangroves to expand.

Given this, mangrove expansion is linked to one of the major issues identified in the harbour plan – the effect of sedimentation on the long-term health of the harbour and its catchment.[11]

Environment Waikato has identified two key actions to manage mangroves – controlling their spread by removing seedlings and the removal of selected mature mangroves blocking waterways. These actions are managed by Environment Waikato through the resource consent process and our navigation safety and river and catchment management activities.

Removing mangroves to achieve other outcomes, like improving views and access to and around the harbour, needs further consultation because the mangrove management issue has remained unresolved throughout the development of the harbour plan. For this reason, no mangroves can be removed (other than the seedlings being removed under the conditions of the resource consent granted to Whangamata Harbour Care Inc.) until further consultation has been carried out and assessed following the distribution of the Whangamata Mangrove Management Options Report.

Six options for managing mangroves

Information from two studies has been used to create six scenarios for managing mangroves, which are detailed in Section 6.2 of the Whangamata Mangrove Management Options Report.

- In early 2007, Environment Waikato commissioned an investigation into various options for mangrove management.[12] [13] This investigation included examining mangroves present in the harbour in 2002, 1993, 1978, 1965 and 1944 (Scenarios 1, 3, 4, 5 and 6) and assessing mangrove management options which would be likely to take mangrove coverage back to each of these historic baselines.
- A previous survey of mangrove areas was carried out by Environment Waikato at the community's request earlier in 2007. This survey identified sites totalling approximately eight hectares as proposed areas for mature mangrove removal. This is Scenario 2 in the options report.

To help the council decide how mangroves will be managed, we would like to know which option Whangamata residents and ratepayers prefer. To help them decide, the mangrove management options report includes pros and cons and cost estimates for each scenario. It also shows how the cost estimates would impact on rates. Feedback can be provided through our questionnaire.

Key things to consider

Managing mangroves is a complex issue. Before deciding which option is best overall, there are a number of key points that should be considered.

A trade-off will be necessary

- Deciding how to manage mangroves will require a trade-off between what the community wants and what's best for the environment.
- If we don't do anything, except continue to remove seedlings, the mangroves will not spread but they will continue to grow. As they grow, they may impact on other habitats, access to and around the harbour may become increasingly difficult and more views could be blocked. On the other hand, clearing large areas of mangroves may create other problems. For example, disturbed sediment may release previously trapped pollutants or shift to create another problem elsewhere. However, there are important gaps in our knowledge of mangroves and their ecological role which means it is extremely difficult to predict what effects may occur and how significant they could be.

[11] Global warming may also become more important in the future, with fewer frosts increasing mangrove seedling survival.
[12] Beca Carter Hollings & Ferner Ltd. 2007: Assessment of Different Mangrove Removal Options. 4250648/PFD: T1:67040-JFL176L08.DOC. Beca Carter Hollings & Ferner Ltd, Tauranga.
[13] Beca Carter Hollings & Ferner Ltd. 2007: Mangrove Growth in Whangamata Harbour. Aerial maps (PDF format). Beca Carter Hollings & Ferner Ltd, Tauranga.

People's values about mangroves vary greatly

- People's values vary greatly. For example, some people see mangroves as an important part of the natural ecosystem, providing a place for animals and plants to live. Others see them as weeds that are an eyesore, block views and restrict the use of the harbour.

The characteristics and ecological roles of mangroves varies

- Depending on their location, there are differences in the characteristics and ecological roles of mangroves, for example:
  - where and how quickly they grow and spread
  - the role they play in local food chains
  - the types and numbers of animals and plants they support.
  - how they respond to changing conditions in the estuaries and harbours they live in.
- Mangroves can also have positive or negative effects on flooding depending on their location. In the harbour, mangroves provide a buffer against waves, protecting the shore from erosion and flooding. However, mangroves in the estuary and river mouths trap sediment and impede water movement. Although this helps maintain water quality the accumulating sediment raises the level of the estuary and river beds, reducing their capacity to store flood waters. In the long-term this increases flood levels and ultimately raises flood risks.
- These differences can also apply to mangrove communities within the same harbour or catchment.

Properties near Wentworth River will still be vulnerable to flooding

- Because sediment will continue to build up whether mangroves are removed or not, a number of commercial and residential properties near the Wentworth River will still be vulnerable to flooding. That's why we need to work together under the harbour and catchment plans to reduce the amount of soil that is eroding from the land and entering Whangamata's waterways.

Costs and funding

- Given that the local community would benefit the most from mangrove management, it is proposed that Whangamata ratepayers would pay 80 per cent of the cost of this work through a targeted rate. Because the harbour is a valued place on the peninsula, and is used by others in the district, it is also proposed that the remaining 20 per cent of the cost would be paid by other Coromandel ratepayers through the existing Peninsula Project rate. The rating information for each scenario is based on an 80 per cent contribution from Whangamata ratepayers.
- The initial removal and ongoing maintenance costs, and subsequent rates, are an estimate only. They could vary significantly depending on the type of consent required (for example, whether it's a notified consent or requires a hearing) and whether this process goes through the Environment Court. Any appeal to the Environment Court objecting to mangrove management is outside Environment Waikato's control. It is also possible the court may decline any proposal to manage mangroves. The cost of the court process may add an additional $7.50 to $15.00 per property to the rates information shown for each scenario (or $1.40 to $2.80 per $100,000 of capital value).

More information on mangroves

Environment Waikato has tried to provide as much information as possible about mangroves and the pros and cons of their management through the full mangrove management options report and harbour plan document, and through information and links on our website at www.ew.govt.nz/projects/whangamata/index.htm.

In addition, the National Institute for Water and Atmospheric Research (NIWA) has produced a publication, *'For and Against Mangrove Control'*. A copy is available in Appendix II of Environment Waikato's Draft Whangamata Mangrove Management Options Report. Copies can also be found on NIWA's website at http://www.niwascience.co.nz/rc/freshwater/mangrove.pdf/view_pdf.

This publication clarifies the facts about mangroves, the consequences of actions taken in relation to them and the likelihood of achieving goals through these actions.

Mangroves and other councils

Other councils are also dealing with the complex challenge of managing mangroves in their area. For example, Auckland Regional Council (ARC) and Environment Bay of Plenty (EBoP) conducted separate reviews of mangrove issues. EBoP's review focuses on mangroves management in their region, while ARC's review focuses on a technical review of the current state of knowledge of mangrove ecology, recent expansion, and its effects. This information is available in PDF format on each council's website or by phoning the council concerned to order a printed copy.

- Environment Bay of Plenty – Estuary Care Review (2007).[14]
- Auckland Regional Council – The New Zealand Mangrove: Review of the Current State of Knowledge[15] and its summary booklet, 'New Zealand's Mangroves' (2007).[16]

[14] Environment Bay of Plenty, 2007: Estuary Care Review. Report to Council, report no. 010607, May, Catalyst Management Services. http://www.envbop.govt.nz/coast/media/pdf/Mangroves-Report-to-Council-010607.pdf.

[15] Morrisey, D., Beard, C., Morrison, M., Craggs, R. and Lowe, M., 2007: The New Zealand Mangrove: Review of the Current State of Knowledge. Auckland Regional Council Technical Publication Number 325, Auckland, New Zealand. http://www.arc.govt.nz/arc/index.cfm?B1BFD2DD-BCD4-1A24-901C-9AD2050A42F2#mangrove.

[16] Auckland Regional Council, 2007: Mangroves in New Zealand. Summary booklet. Auckland Regional Council, Auckland, New Zealand. http://www.arc.govt.nz/arc/index.cfm?BB3A7F29-BCD4-1A24-9734-A117F8A54F0E.



Mangrove seedlings in Whangamata can be removed under specific consented conditions between January and July each year.

Questions and answers

Who are the people who have been consulted in developing the Whangamata Harbour Plan?

There has been significant community involvement in the plan's development including a number of meetings held in the Whangamata area. The plan has also been through several drafts with input from Thames-Coromandel District Council and groups such as the Whangamata Harbour Committee (a division of the Whangamata Community Board), Whangamata Ratepayers Association, Clean Water Whangamata, Whangamata Harbour Care, Royal Forest and Bird Protection Society Inc., Department of Conservation, Hauraki Màori Trust Board, Whangamata Màori Committee Ngati Pu Kaukainga, Te Runanga o Ngati Pu, Te Kupenga o Ngati Hako Inc., Te Rununga a Iwi o Ngati Tamatara, Ngati Whanaunga Inc., and Nga Uri o te Ngahere Trust.

Why are there two plans for Whangamata which appear to be addressing the same things?

The two plans have different functions. The harbour plan has a wider perspective, looking at managing the harbour and its catchment in the long-term while taking into account social, cultural, environmental and economic considerations. The catchment plan is a 'sub-plan' to the harbour plan document and is therefore part of the harbour plan's overall management approach. The catchment plan sets out priority works to address the sedimentation and flooding issues identified in the harbour plan, the timeframe over which the works will be done and estimated costs.

Why should I be concerned about Whangamata's environment?

If people don't make an effort to protect an area's natural environment along with its native plants and animals, its long-term sustainability becomes threatened. Caring for our environment is reason enough to be concerned, but there are more pragmatic reasons to consider too. For example, harmful environmental impacts from our activities also affect people's safety, by increasing flooding and erosion. Reducing the 'natural character' of an area can make it less enjoyable to live in or visit. This can have economic effects on a community as people leave and visitor numbers drop. These are just two examples of how changes in one aspect of our environment can impact on many other situations.

What do the harbour plan and the catchment plan have to say about forestry issues?

The plans recognise that land clearance for urban development, forestry and farming has changed the natural character of Whangamata's catchment significantly. Sedimentation, erosion and run-off are key concerns in relation to forestry and other agricultural activities. The Draft Whangamata Harbour Plan provides an overview of these concerns and possible future actions, while the Draft Whangamata Catchment Management Plan sets out priority works to reduce erosion. Suggested forestry-related initiatives recommended by these plans include installing silt traps and buffer zones in forestry areas, ensuring pines are not planted or harvested near streams, and carrying out ongoing enforcement and inspections of forest harvesting consent conditions. These and other ongoing efforts by Environment Waikato will also ensure forestry activities are aligned with existing and emerging 'best practice'.

It is recognised that forestry has a positive role to play in stabilising the catchment once the forest is established. The management issues noted in the harbour and catchment plans relate primarily to the harvesting and replanting stages which need careful management.

What about the other issues in the harbour and its catchment which won't be dealt with by the current plans and proposals?

Any outstanding items not dealt with in the current plans can be addressed through council processes, such as the Long-Term Council Community Plan (LTCCP), or by community processes such as through the Whangamata Community Plan or care groups.

Need more information?

- Attend our information day – Saturday, 20 October 2007 from 10am-2pm at the Thames-Coromandel District Council office on Port Road in Whangamata.
- Visit www.ew.govt.nz/projects/whangamata/index.htm to download a copy of the:
  - Draft Whangamata Harbour Plan
  - Draft Whangamata Catchment Management Plan
  - Whangamata Mangrove Management Options Report
  - feedback form.
- Call our freephone and chat to one of our staff.

What happens next?

- Feedback is welcome up to Wednesday, 7 November 2007 on the:
  - issues identified in the Draft Whangamata Harbour Plan that are a risk to the harbour
  - the priority works proposed in the Draft Whangamata Catchment Management Plan to address the sedimentation and flooding issues identified in the harbour plan, and the timeframe over which the work will be done
  - options for managing mangroves.

- Feedback from the Whangamata community will be used to help us finalise the harbour and catchment plans, and the timeframe over which the work identified in the catchment plan will be carried out.

- The feedback will also be used to help the council decide how mangroves will be managed, but before any decisions can be made we will need to:
  - have the appropriate experts assess the feedback
  - determine whether our decision on mangrove management requires further consultation through a formal process – if so, this would be through public notification and a submissions and hearings process
  - take the feasible scenario(s) through the resource consent process
  - follow the processes of the Environment Court where required.

Environment Waikato is committed to working with the community and key organisations on these issues, so we can take people's differing views into account as realistically as possible through a democratic process. Environment Waikato will keep the community and other relevant stakeholders informed on progress throughout the process.

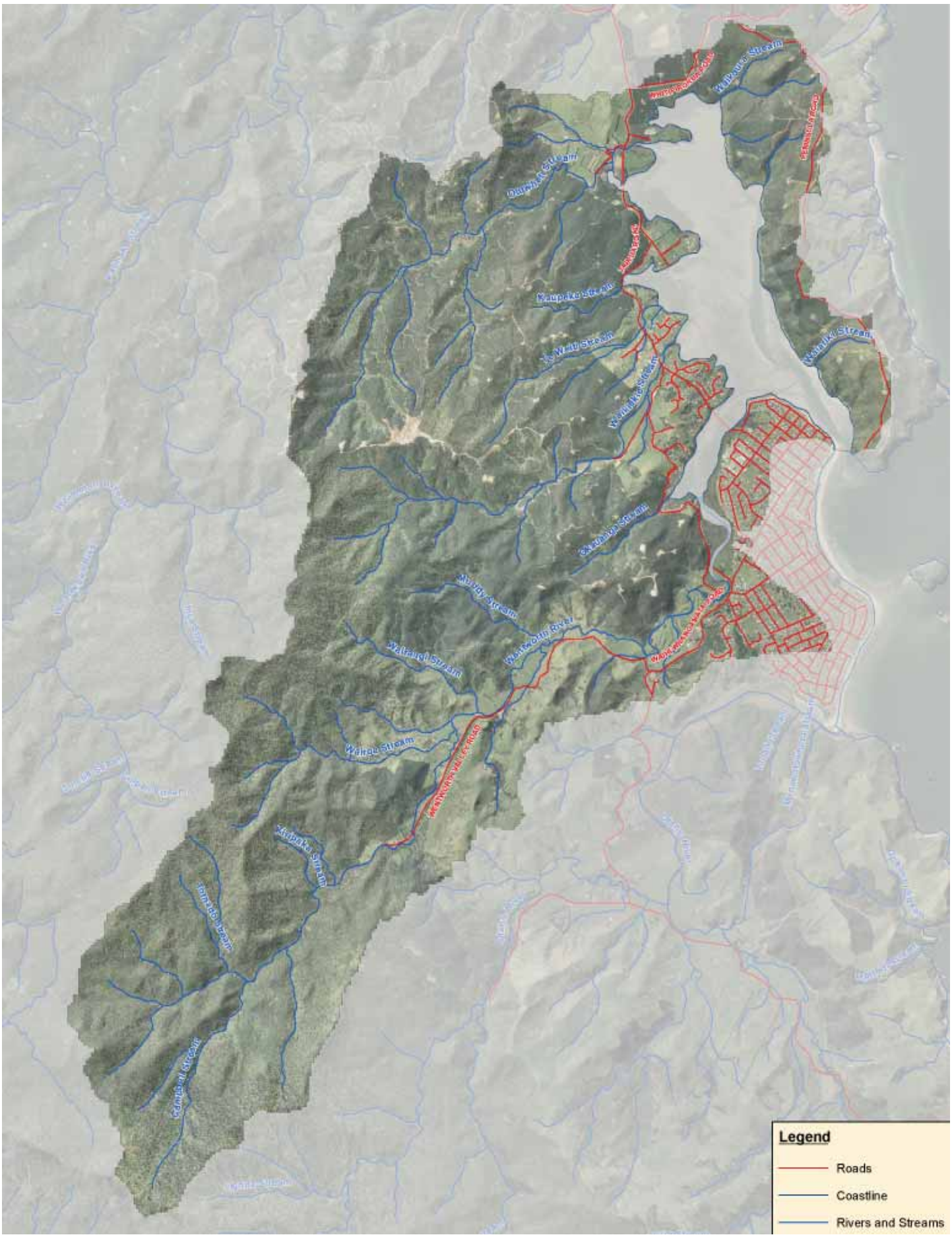


A clean, sandy harbour with productive pipi and cockle beds is important to many people.

Appendix 1

Maps

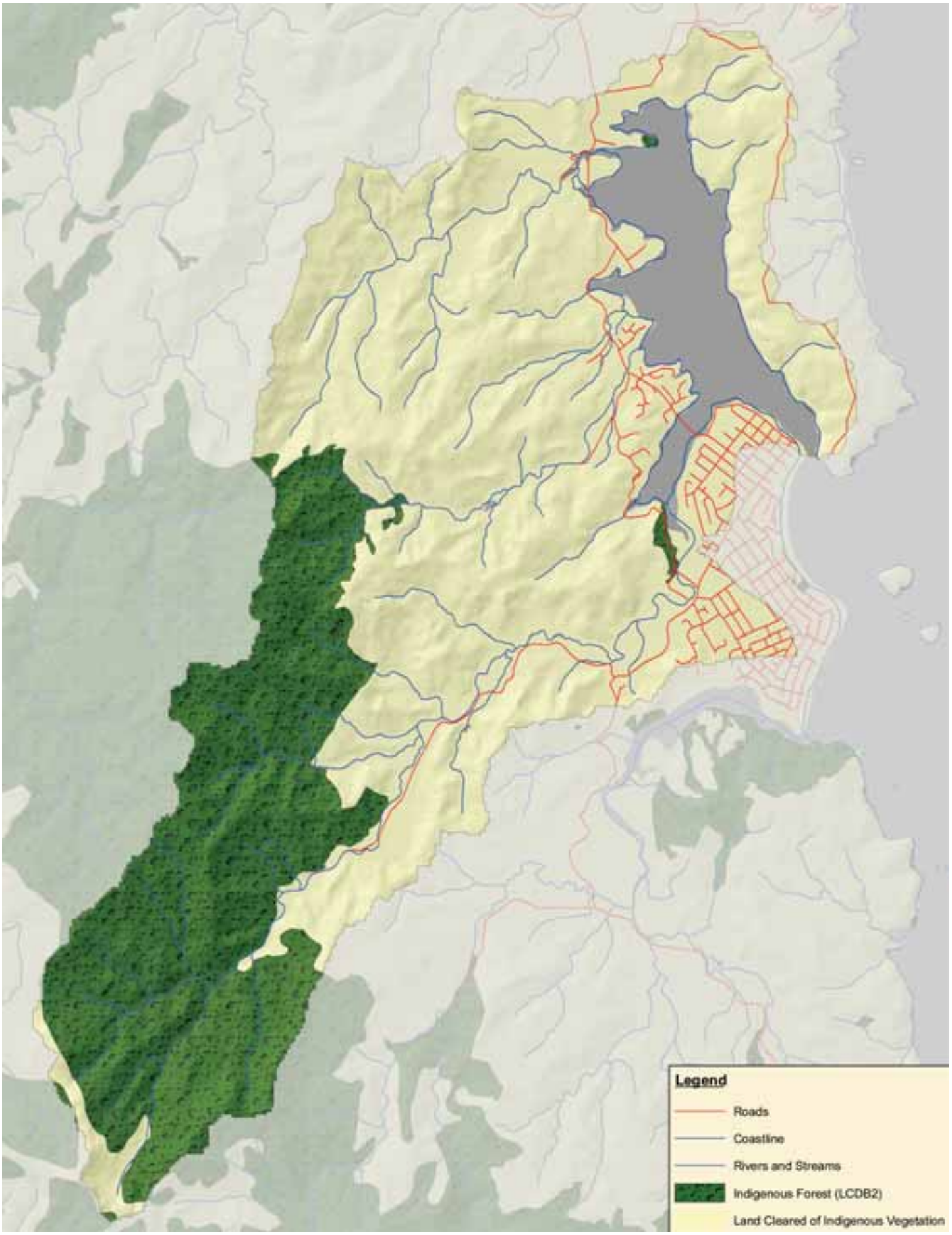
Whangamata catchment map



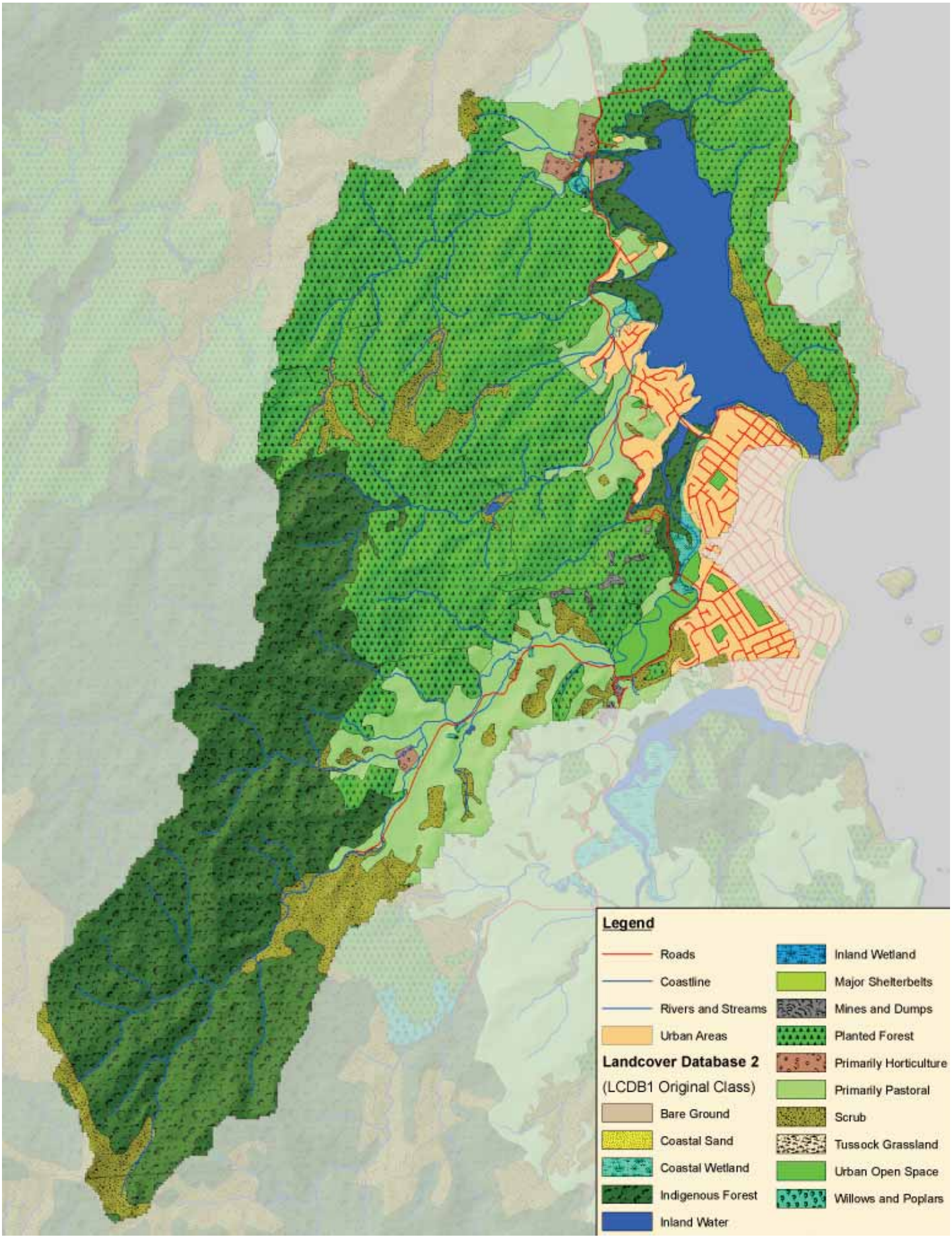
Whangamata locations map

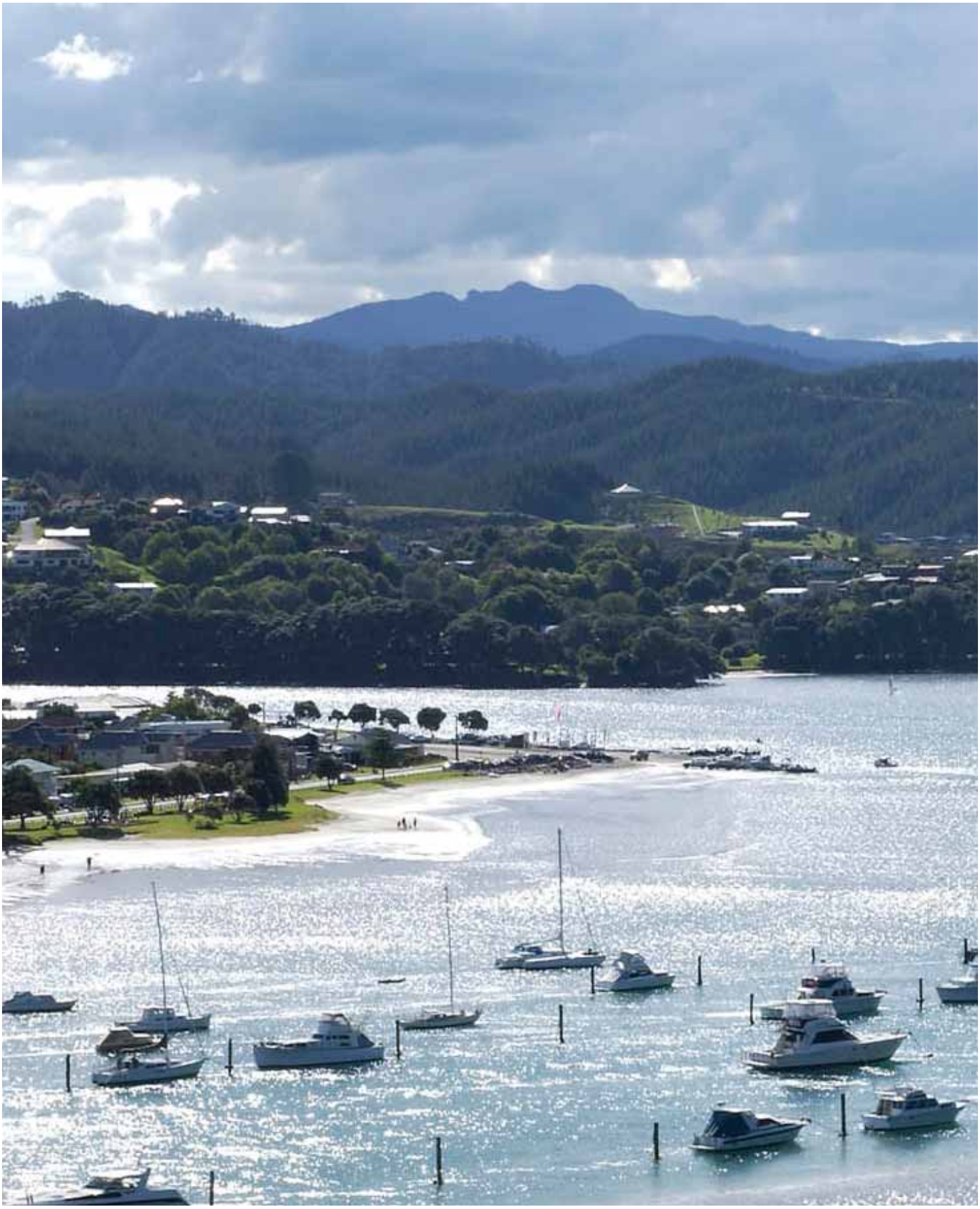


Whangamata catchment – Land clearance



Whangamata catchment – Land use





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